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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LAM, DANIEL K

ART UNIT PAPER NUMBER

2667

DATE MAILED: 04/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/623,012

Applicant(s)

TERAOKA, FUMIO

Examiner

Daniel K Lam

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935.C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On page 5, line 11, "upper 64 bits" should be "**lower** 64 bits" in order to be consistent with what is shown in fig. 3.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1 and 2** remain rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,625,145 issued to Winell in view of U. S. Pat. No. 6,614,774 issued to Wang in further view of U. S. Pat. No. 6,172,986 issued to Watanuki et al.

Regarding **claim 1**, Winell discloses a method of transmitting data from a mobile station to a host through a router using lower IP-address bits as short identifier, comprising:

- Assigning a unique short identifier to a mobile station and using it as the lower part of its IP-address bits. The upper part of the IP-address becomes the subnet address.
- Furthermore, the serving node 120 uses the short identifier as key for accessing the local data 222 (storing a node identifier of each node and a home prefix indicating a

sub-net to which the node is usually connected, in connection with a host name of the node). See fig. 4 reference 400 and col. 5, lines 40-50.

- The serving node 120 generates an IP address using conventional technique for a packet to be sent (generating an IP address having the node identifier and home prefix which have been read). See col. 5, lines 24-31. *Although, Winell does not disclose explicitly the reading of a second node identifier but Wang and Watanuki et al do. See the discussions in Wang and Watanuki et al paragraphs.*
- After getting the IP-address, the mobile host 100 prepares to send a data packet to host 170 via router 120 (generating a data packet having the IP address generated, and transmitting the data packet to the router of the sub-net to which the second node is usually connected, in accordance with the IP address). See fig. 4 reference 410 and col. 5, lines 63-65.
- Then the serving node adds the upper part of the IP-address with the mobile station short identifier to form the source IP address before routing the packet to the host (transmitting the data packet to the second node on the basis of the header added to the data packet). See fig. 4 reference 420, and col. 5, line 64 to col. 6, line 3.

However, Winell does not disclose the limitations of reading a node identifier corresponding to a host name of the second node input and the home prefix of the second node, nor adding a header indicating a location to which the second node has moved, to the data packet transmitted to the router, on the basis of cache information held by the router to manage the second node.

Wang discloses the limitation of using a DNS query to translate a given host name into an IP address (reading a node identifier corresponding to a host name of the second node input and the home prefix of the second node). See fig. 4 reference 110, HOME DNS SERVER, and col. 7, lines 2-14.

Furthermore, Watanuki et al. discloses the limitation of adding an IPv6 header to the data packet. The Ipv6 header contains the address of the destination network (adding a header indicating a location to which the second node has moved, to the data packet transmitted to the router, on the basis of cache information held by the router to manage the second node). See fig. 17 reference 1701, IPv6 HEADER and col. 18, lines 20-36.

Therefore, it would have been obvious to those having ordinary skill in the art, at the time of invention, to query a DNS server to obtain node identifier and IP address by host name, and adding a header to the data packet before routing for couple of reasons.

Firstly, one of the most convenience means of denoting destination end point of another party is the use host name to obtain the node identifier and its IP address as taught by Wang (see col. 2, lines 38-43) *so that peer to peer or client to server communications can simply refer to each other by names instead of the numeric IP addresses.* Secondly, adding a *second* header to the data packet would allow a mobile node in a foreign network to execute communication successfully without changing setting of IP address and without cutting off the network connection as taught by Watanuki et al. (see col. 2, lines 37-44).

Regarding claim 2, in addition to disclose the limitations in claim 1, Wang discloses querying the DNS 30 for a IP address after given a hostname (the node

identifier corresponding to the host name of the second node input and the home prefix of the second node are read by using an application program. See fig. 2 reference 30, DNS, and col. 2, line 67 to col. 3, line 11.

Allowable Subject Matter

4. **Claim 3** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Regarding the remark (see page 3, paragraph 3, lines 5-8) concerning about the reading and generating of an IP address disclosed by Winell, although Winell does not disclose explicitly the reading of a second node identifier but Wang and Watanuki et al do (also see *italicized lines* in claim 1).

Regarding the remark (see page 4, paragraph 2) concerning about the motivation or suggestion of the teachings of Winell in view of Wang in further view of Watanuki et al, Wang teaches that using a DNS query to translate a given host name into an IP address so that peer to peer communication can simply refer to each other by names instead of the numeric IP address, and Watanuki et al teaches the adding of an IPv6 header containing the address of the second node to the data packet to allow a mobile node in a foreign network to execute communication successfully without changing setting of IP address and without cutting off the network connection (also see *italicized lines* in claim 1).

Contact Information

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel K. Lam whose telephone number is (703) 305-8605. The examiner can normally be reached on Monday-Friday from 8:30 AM to 4:30 PM.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (703) 305-4378. The fax phone number for this Group is (703) 872-9314.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status Information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DKL *dbl*
April 16, 2004



CHAU NGUYEN
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